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10/598,337	08/24/2006	Yong-Woo Kim	Q96705	2754
23373 7590 06/10/2009 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037				
EXAMINER				
CHANG, EDWARD				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/598,337

Applicant(s)

KIM ET AL.

Examiner

EDWARD CHANG

Art Unit

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Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on March 27, 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-19, 21, 23 and 24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-19, 21, 23 and 24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF-08)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Status of Claims

1. This action is in reply to the response filed on 27th of March 2009.
2. Claims 1-15, 20 and 22 were canceled.
3. Claims 16-18, 19, 23, and 24 were amended.
4. Claims 16-19, 21, 23 and 24 are currently pending and have been examined.

Response to Arguments

5. Applicant's arguments filed 27th of March 2009 have been fully considered but they are not persuasive. Referring to the previous Office action, Examiner has cited relevant portions of the references as a means to illustrate the systems as taught by the prior art. As a means of providing further clarification as to what is taught by the references used in the first Office action, Examiner has expanded the teachings for comprehensibility while maintaining the same grounds of rejection of the claims, except as noted above in the section labeled "Status of Claims." This information is intended to assist in illuminating the teachings of the references while providing evidence that establishes further support for the rejections of the claims.
6. Applicant has requested examiner to check a proper box indicating a copy of the certified copy of the priority document is received. By checking box (a), it means all the requirements are met.
7. With regard to the limitations of claim 16, the limitation "*... receiving payer information from a relay server, wherein the payer information is information on the payers who have completed a payment process, transmitted from a financial institution server and processed by the relay server.*", applicant argues current arts fail to teach construction related to the "relay server" as recited claim 16 of the present invention. The Examiner respectfully disagrees. First of all, "relay server" is a very broad term used to describe a server. Simply a server that relays some sort of information can be considered as "relay server". Therefore "clearing house server" can be considered as "relay server". Applicant also argues "*...neither of the bill processing server nor the*

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clearing house cannot implement a function of the relay server which processes payer information (or client information) provided from financial institutions..." The processing of the payer information is also very broad and "clearing house server" also does processing of the information. Examiner recommends the applicant to further describe the "relay server" and the "processing of the relay server" in the claim to further narrow the claims.

8. With regard to the limitations of claims 17 and 18, the applicant argues the arts fail to teach *"...management server that re-processes the firstly-processed payer information provided from the relay server and then provides the re-processed payer information to the biller server..."* The Examiner respectfully disagrees. First of all, again "management server" is a very broad term. Any server that manages accounts such as Bill processing server can be considered as "management server". Also "re-processes" is also very broad. For example in Fig. 1 of Senez, when certain information is sent from "clearing house server"(relay server) to the bill processing server (management server), it is obvious that certain "re-processing" is needed by the bill processing server (management server) to route the received information to the correct corresponding account. Examiner recommends the applicant to further describe the "management server" and the details of "re-processing" in the claim to further narrow the claims. Simply "processing" or "reprocessing" of the information using multiple servers is already a well known practice in the current field of art.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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10. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Examiner's Note: The Examiner has pointed out particular references contained in the prior art of record within the body of this action for the convenience of the Applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply. Applicant, in preparing the response, should consider fully the entire reference as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

11. Claims 16~18, and are rejected under 35 U.S.C. 103 (a) as being unpatentable over Ronen (US 5,845,267) in view of Senez (US 7,200,551 B1) in further view of McNair (US 2001/0037297 A1).

As per Claim 16:

Ronen as shown discloses the following limitations:

- *extracting required information including information on the payers and the payment amount from a receipt management database (See at least Fig. 1, 126) for managing at least information on payers who have to pay and payment amount that the respective payers have to pay for a certain period of time; and (See at least Fig. 1, 127)*
- *transmitting the bill for payment to a payer receiver, and (See at least Column 7, Line 22+, "...Billing server to properly bill each user...")*

However, Ronen discloses using a transaction server but it specifically does not mention using a relay server. But it is commonly known in the network art to use multiple servers including a relay server. This is also clearly shown by Senez.

- *receiving payer information from a relay server, wherein the payer information is information on the payers who have completed a payment process, transmitted from a financial institution server and processed by the relay server. (See at least Fig. 1, Items x, 11, where x = financial institution, 11 = relay server)*

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Ronen's internet billing system as taught by Senez's automated billing system to add a extra relay server to the system. This would give extra processing power to further process the necessary data. This would ultimately increase the efficiency of the system. Also, combination of Ronen/Senez specifically does not mention the following limitations. But McNair discloses the following limitations:

- *converting the extracted information into a two-dimensional (2D) code, (See at least Page 3, Paragraph 0048+, "...encode the data into a barcode processing instruction...")*
- *making out a bill for payment with the converted 2D code attached thereto, (See at least Fig. 2, Item 42, 46)*

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Ronen/Senez's billing system as taught by McNair's billing system aided by scanner to use the 2D code as part of the bill. This simplifies the billing process and greatly increases the effectiveness of the system.

As per Claim 17:

Ronen as shown discloses the following limitations:

- *extracting required information including information on the payers and the payment amount from a receipt management database (See at least Fig. 1, 126) for managing at*

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least information on payers who have to pay and payment amount that the respective payers have to pay for a certain period of time; and (See at least Fig. 1, 127)

- *transmitting the bill for payment to a payer receiver, and (See at least Column 7, Line 22+, "...Billing server to properly bill each user...")*

However, Ronen discloses using a transaction server but it specifically does not mention using a relay server. But it is commonly known in the network art to use multiple servers including a relay server. This is also clearly shown by Senez.

- *receiving information from a management server, wherein payer information is re-processed information on the payers who have completed the payment process, and firstly-processed information being provided by a relay server which processes information on the payers who have complete a payment process, which is received from the financial institution server. (See at least Fig. 1, Items x, 11, 12, where 12 = management server, 11 = relay server)*

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Ronen's internet billing system as taught by Senez's automated billing system to add a extra relay server to the system. This would give extra processing power to further process the necessary data. This would ultimately increase the efficiency of the system. Also, combination of Ronen/Senez specifically does not mention the following limitations. But McNair discloses the following limitations:

- *converting the extracted information into a two-dimensional (2D) code, (See at least Page 3, Paragraph 0048+, "...encode the data into a barcode processing instruction...")*
- *making out a bill for payment with the converted 2D code attached thereto, (See at least Fig. 2, Item 42, 46)*

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Ronen/Senez's billing system as taught by McNair's billing system aided by scanner to use the 2D code as part of the bill. This simplifies the billing process and greatly increases the effectiveness of the system.

As per Claim 18:

Ronen as shown discloses the following limitations:

- *extracting required information including information on the payers and the payment amount from a receipt management database (See at least Fig. 1, 126) for managing at least information on payers who have to pay and payment amount that the respective payers have to pay for a certain period of time; and (See at least Fig. 1, 127)*
- *transmitting the bill for payment to a payor receiver, (See at least Column 7, Line 22+, "...Billing server to properly bill each user...")*

However, Ronen discloses using a transaction server but it specifically does not mention using a relay server. But it is commonly known in the network art to use multiple servers including a relay server. This is also clearly shown by Senez.

- *receiving information on the payers who have completed the payment from a financial institution server via a relay server, (See at least Fig. 1, Items x, 11, where x = financial institution, 11 = relay server)*
- *providing firstly-processed payer information received from the relay server to a management server, and (See at least Fig. 1, Items 12, 11, where 12 = management server, 11 = relay server)*
- *receiving re-processed payer information from the management server, wherein the reprocessed payer information is provided by the management server which re-processes the firstly-processed payer information. (See at least Fig. 1, Items 12, 18, where 12 = management server, 18 = client/user)*

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Ronen's internet billing system as taught by Senez's automated billing system to add a extra relay server to the system. This would give extra processing power to further process the necessary data. This would ultimately increase the efficiency of the system.

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Also, combination of Ronen/Senez specifically does not mention the following limitations. But McNair discloses the following limitations:

- *converting the extracted information into a two-dimensional (2D) code*, (See at least Page 3, Paragraph 0048+, "...encode the data into a barcode processing instruction...")
- *making out a bill for payment with the converted 2D code attached thereto*, (See at least Fig. 2, Item 42, 46)

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Ronen/Senez's billing system as taught by McNair's billing system aided by scanner to use the 2D code as part of the bill. This simplifies the billing process and greatly increases the effectiveness of the system.

12. Claims 19 and 21 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Ronen/McNair or Ronen/Senez/McNair in further view of Antognini et al. (hereinafter "Antognini"); (US 2002/0023055 A1).

As per Claim 19:

Combination of Ronen/McNair or combination of Ronen/Senez/McNair discloses the limitations as shown in the rejections above. However they don't disclose the following limitations. But, Antognini discloses the following limitations:

- *wherein when an automated teller machine (ATM) is provided with the bill for payment and payment means from the respective payers*, (See at least Page 7, Paragraph 0062+, "...take those bills to an ATM...")
- *and scans and decodes the 2D code of the bill, the financial institution server implements a payment process using the decoded information and the payment means provided from the ATM, and transfers the paid payment amount to an account of the payee*. (See at least Page 7, Paragraph 0062+, "...ATM's scanner...", it does not specifically state 2D code, but 2D code is just one form of digital data mentioned by Antognini)

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Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Ronen/ McNair's internet billing system as taught by Antognini's billing system aided by scanner to use the ATM with the scanner to process the billing. This would help payers to easily make necessary payments on time with their near by ATM.

As per Claim 21:

Combination of Ronen/McNair discloses the limitations as shown in the rejections above. However Ronen/McNair doesn't disclose the following limitations. But, Antognini discloses the following limitations:

- *wherein the payer information provided from the financial institution server to the relay server is either the 2D code attached to the bill for payment or decoded information of the 2D code attached to the bill for payment. (See at least Page 5, Paragraph 0053+, "...electronic mail with an attachment that contains digital information...")*

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Ronen/ McNair's internet billing system as taught by Antognini's billing system aided by scanner to use the ATM with the scanner to process the billing. This would help payers to easily make necessary payments on time with their near by ATM.

13. Claims 23 is rejected under 35 U.S.C. 103 (a) as being unpatentable over Ronen/McNair or Ronen/Senez/McNair in further view of Kitchen et al. (hereinafter "Kitchen"); (US 6,289,322 B1).

As per Claim 23:

Combination of Ronen/McNair or combination of Ronen/Senez/McNair discloses the limitations as shown in the rejections above. However they don't disclose the following limitations. But, Kitchen discloses the following limitations:

- *wherein the payee server further carries out a function of making out a notice of arrears when the payee server has not been provided with payer information until the payment*

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due date, and transmitting the notice of arrears to the receiver of the payer. (See at least Page 10, Paragraph 0045+, "...reminder notice could be sent...", although it does not specifically wait until the payment due date (instead it is sent just prior to due date), but this is a obvious modification of the art because it is common practice to send a notice when the payment is late.)

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Ronen/ McNair's internet billing system as taught by Kitchen's electronic billing system to message the payer when the payment is late. This would help alert the payers to make necessary payments to avoid late fees.

14. Claim 24 is rejected under 35 U.S.C. 103 (a) as being unpatentable over Ronen/Senez/McNair in further view of Budow et al. (hereinafter "Budow"); (US 5,661,517).

As per Claim 24:

Combination of Ronen/Senez/McNair discloses the limitations as shown in the rejections above. However Ronen/Senez/McNair doesn't disclose the following limitations. But, Budow discloses the following limitations:

- *wherein the payment process further comprises, the steps of comparing the payment amount that the respective payers have to pay for a certain period among decoded information with the total amount payable from payment means; if the payment amount is the same as or less than the total amount, subtracting the money corresponding to the payment amount from payment means and displaying a screen of the ATM a message informing of a normal completion of payment; and if the payment amount is greater than the total amount, displaying the screen a message informing of payment disable is implemented. (See at least Column 26, Line 66+, "...account (debit or ATM)...inform the customer that the debit card account has insufficient funds...", if TV could display the information, than it is obvious and well know in the art to have ATM display such*

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information); (Also see at least Column 16, Line 36+, "...transmit screens notifying the customer that card was approved and that the transaction is being completed...")

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Ronen's internet billing system as taught by Budow's billing system to let the user know if there is sufficient or insufficient fund in the account to pay the bill. This would help users to effectively manage their accounts.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).
11. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry of a general nature or relating to the status of this application or concerning this communication or earlier communications from the Examiner should be directed to **Edward Chang** whose telephone number is **571.270.3092**. The Examiner can normally be reached on Monday-Friday, 9:30am-5:00pm. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, **Kambiz Abdi** can be reached at **571.272.6702**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://portal.uspto.gov/external/portal/pair> <<http://pair-direct.uspto.gov>>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at **866.217.9197** (toll-free).

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June 06, 2009
/Edward Chang/ Examiner, Art Unit 3692
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